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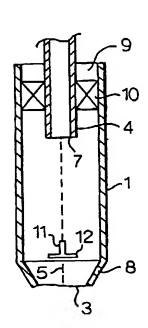
- (74) Agent: STEWART, Charles, W.; Shell Oil Company, One Shell Plaza, P.O. Box 2463, Houston, TX 77252-2463 (US).
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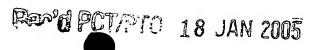
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SWIRL TUBE SEPARATOR



(57) Abstract: Swirl tube separator for separating solids from a gas-solid containing feed comprising a tubular housing, an inlet for introducing a gas-solids mixture at one end of said housing, a solids outlet opening at the opposite end of said housing, and a co-axial positioned tubular gas outlet conduit placed at an end of said housing, wherein along the axis of the tubular housing a vortex extender pin is present.





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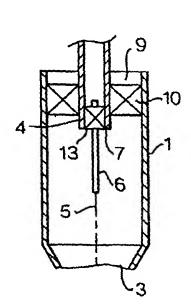
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(54) Title: CYCLONE SEPARATOR WITH A VORTEX EXTENDER PIN



(57) Abstract: Swirl tube separator for separating solids from a gas-solid containing feed comprising a tubular housing, an inlet for introducing a gas-solids mixture at one end of said housing, a solids outlet opening at the opposite end of said housing, and a co-axial positioned tubular gas outlet conduit placed at an end of said housing, wherein along the axis of the tubular housing a vortex extender pin is present.

